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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,463	11/21/2003	Xiao Lu	16318-1US RC/DSiM/ab	8074

20559 7590 04/14/2006

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CANADA

EXAMINER

MCCORMICK EWOLDT, SUSAN BETH

ART UNIT	PAPER NUMBER
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1655

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/717,463	LU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	S. B. McCormick-Ewoldt	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 29-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The amendment of January 27, 2006 is hereby acknowledged and entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### **Election/Restrictions**

Applicant elected Group I in the reply filed on March 8, 2005 and the reply has been treated as an election without traverse because Applicant did not distinctly and specifically point out the supposed errors in the restriction requirement.

#### **Claims Pending**

Claims 1-40 are pending. Claims 1-28 are examined. Claims 29-40 are withdrawn.

#### **Claim Rejections - 35 USC § 102**

Claims 1-3, 7, 11-14 remain rejected under 35 U.S.C. 102(b) as being anticipated by Kutney *et al.* (US 5,770,749) as disclosed in the previous Office action. Applicant's arguments filed January 27, 2006 have been fully considered but they are not persuasive.

Kutney *et al.* (US 5,770,749) teach a process for pulping soap using a ketone (i.e. acetone or propan-2-one) and methanol to obtain the phytosterol and amounts,  $\beta$ -sitosterol (62.6% and 64.7%), campersterol (16.6% and 16.4%) and stigmastanol (23.2% and 17.2%). The process is carried out from a temperature of about 25°C to about 150°C. (See column 5, lines 27-30, 36-37, 51; column 6, lines 30-36 and Example 1). Thus, the process method for pulping soap by Kutney *et al.* meet the limitations of claim 1 and thus anticipates the claimed invention.

**Applicant argues** that Kutney describes a liquid/liquid extraction process. This is not found persuasive because Kutney that the extraction phase consists of a "creamy precipitate or residue." In a broad sense of the term and the most reasonable interpretation of the terms would be construed as semi-solid.

In response to **Applicant's argument** that the reference fails to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., use of only

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one solvent) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Applicant argues** that Kutney requires the use of non-polar organic solvent to extract phytosterols. This is not found persuasive because a non-polar organic solvent is still an organic solvent and can be used in the process of pulping soap.

Therefore, the rejection is proper and is maintained.

*Claim Rejections - 35 USC § 103*

Claims 1-28 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Kutney *et al.* (US 5,770,749) and Johansson *et al.* (US 4, 044, 031).

Kutney *et al.* (US 5,770,749) discloses a process for pulping soap using a ketone (i.e. acetone or propan-2-one) and methanol to obtain the phytosterol and amounts,  $\beta$ -sitosterol (62.6% and 64.7%), campersterol (16.6% and 16.4%) and stigmastanol (23.2% and 17.2%). The process is carried out from a temperature of about 25°C to about 150°C. Kutney *et al.* does not separate the phases into a liquid or solid stage. However, since the reference teaches the process of pulping soap in the same method as claimed, the reference extract would intrinsically have the same characteristics as claimed. Even though the reference does not teach the metal salts this would be inherent because the reference composition is the same as the claimed composition.

Johansson *et al.* (US 4, 044, 031) discloses separating tall oil (i.e. pulping soap) from sterols with acetone (i.e. propan-2-one), to obtain pure sterols from the unsaponifiable fraction and then adding a second solvent to further separate (column 2, lines 12-59; Example 2).

The references taken together disclose using a solvent to separate the pulping soap by using different extracts into a liquid phase and a solid phase. By separating into a solid phase one can extract fatty acids as taught by Johansson. Thus, a person of ordinary skill in the art would reasonably expect to separate the fatty acids and phytosterols by using a two-step process of extraction to obtain additional fatty acids and phytosterols. Based on this reasonable expectation for success, a person of ordinary skill in the art would be motivated to modify the teachings of the references to include an additional step of extraction. From the teaching of the references, it

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is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

**Applicant argues** that both references disclose a liquid-liquid extraction process and is different from the invention, which uses a liquid/solid extraction. this is not found persuasive because as discussed *supra* Kutney has a creamy precipitate or residue that could be construed as a semi-solid.

**Applicant argues** that the references require the use of non-polar organic solvent to extract phytosterols. This is not found persuasive because a non-polar organic solvent is still an organic solvent and can be used in the process of pulping soap.

Therefore, the rejection is proper and is maintained.

#### Summary

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Susan B. McCormick-Ewoldt whose telephone number is (571) 272-0981. The Examiner can normally be reached Monday through Thursday from 6:00 a.m. to 4:30 p.m.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terry McKelvey, can be reached on (571) 272-0775. The official fax number for the group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TERRY MCKELVEY, PH.D.  
SUPERVISORY PATENT EXAMINER